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Landscaping Nebraska Style

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Landscaping Nebraska Style

THE CHALLENGE

The environment of Nebraska presents many challenges to those wanting to beautify the landscapes of their homes, businesses and communities. Extremes of heat and cold, large fluctuations in temperature, periodic drought, difficult soils - the list could go on and on.

But the biggest challenge may be mental, not environmental. We may approach gardening and landscaping with certain notions and ideas that make the task harder than it really needs to be; and that may cause us to overlook approaches that make the best sense, both environmentally and aesthetically.

Imagine for a minute your ideal landscape. Conjure up the image in your mind. Chances are that for most gardeners it will be a replica of something seen "back east." Much of what we have tried to do in our gardens, yards and public landscapes in Nebraska is to reflect the horticultural practices and traditions of the eastern United States, traditions that, historically and culturally, have their origins in Europe.

While there is nothing inherently wrong with these practices and traditions, there are two main reasons for questioning their imitation in Nebraska. The first is practical. Eastern landscape mainstays like hollies, rhododendrons and boxwood are wonderful plants, but they can require serious horticultural effort to grow in Nebraska (and even then may just barely survive). Many of the important ornamental plants used in the east just do not do well in our climate and soils, despite our best efforts to coddle them with extra water and care.

The second reason is a philosophical one. Nebraska is not Virginia or Indiana or even Missouri. The natural landscape is quite different, as are the plants that comprise that landscape. Instead of trying to imitate other places and import other traditions and styles, why not celebrate the intrinsic beauty of Nebraska in our cultivated landscapes? Why not develop a "Nebraska Style" of landscaping?

LOOKING TO THE LAND

We can start to develop this Nebraska Style by taking time to consider where we live. To look to the natural landscape of Nebraska for ideas and inspiration. To discover the "genius" of the place.

In a very general sense, Nebraska has three basic plant communities - the eastern woodlands, the Panhandle pinelands and the prairies in between. Each has its own unique assemblage of plants, and each has its own distinctive character or "feel." A Nebraska Style of landscaping would reflect one or more of these natural settings in the cultivated landscapes of our homes, businesses and communities.

The most obvious way to do this is through the use of native plants - those that grow naturally in a given area. A list of the important native plants for each of these three plant communities is presented in this issue of *The Seed*.

Some people are purists when it comes to "natural" landscaping and use nothing but native plants. However, native plants are not always easy to obtain. Therefore, sometimes out of necessity, others try to achieve the same effect using non-native plants similar in appearance and cultural requirements to natives. For example, rugosa rose (*Rosa rugosa*), a native of Asia, might be a substitute for the native prairie rose (*Rosa arkansana*). Both are similar in appearance and hardiness and both produce a similar effect in the landscape. However, while the rugosa rose is widely available, the prairie rose cannot be found in the nursery trade.

The other way to reflect a sense of place in our cultivated landscapes is to mirror the patterns that are found in natural places. Every landscape has its own unique textures and tones, rhythm and stride which can be replicated to an extent through the selection and placement of plant material. Once seen and comprehended, these patterns can become a guiding force in creating landscapes that reflect a sense of the natural.

To develop a Nebraska Style of landscaping, we need to take a closer look at the three basic plant communities of the state.

THE EASTERN WOODLANDS

Cloaking the hills and bluffs of the Missouri River, and trailing westward along its tributaries, is a forest dominated by oaks and supported by a cast of other large trees. The heart of this plant community, technically known as the eastern deciduous forest, lies to the east and south, in the Ozarks of Missouri and Arkansas. The stands of this forest along the Big Muddy in Nebraska, at places such as Indian Cave State Park, represent the western fringes of its distribution in the United States.

Tall, canopy-forming trees form the backbone of this plant community. Depending on the exposure and slope of the site, the dominant tree is usually bur oak, with green ash, hackberry, elm and walnut also in attendance. On moister sites, red oak and linden provide the shade. Other trees such as white ash, bitternut and shagbark hickory, and oaks like chestnut, white, and black oak also can be found in the forests of southeast Nebraska, although they are much less common. These trees are all deciduous, meaning they lose their leaves in the winter.

With these big trees jostling for space in the canopy, smaller trees and other plants must live either in the shade or at the edge of the forest. So it is that the eastern woodlands have another suite of trees that occupies the space between the canopy and the ground - the understory trees.

The eastern woodlands in Nebraska include a number of smaller-statured trees. Many bloom in the spring, producing their flowers before the larger trees leaf-out and intercept most of the sunlight. These understory trees include redbud, serviceberry and hawthorn. Ironwood is another important understory tree, although its fruit is showier than its flowers.

These trees also can occur at the edges of the forest, creating a transition zone between prairies and pastures and the main body of the forest. They are often accompanied by an array of shrubs such as rough-leaved dogwood, coralberry, hazelnut and sumacs.

Below the understory is a third layer of vegetation. This is the ground layer, and is comprised primarily of shade-tolerant wildflowers. Many of these plants are spring blooming ephemerals that flower early and go dormant as the canopy leafs out. A few shrubs, such as gooseberry and coralberry, also can tolerate the deep shade at the ground layer.

DESIGN IMPLICATIONS

While this plant community occupies only a narrow zone along Nebraska's Eastern Shore, it is the one we most often try to imitate, consciously or unconsciously, in our cultivated surroundings. It is a landscape that most people find comforting, perhaps because we like the sense of enclosure provided by the trees, or because this is the environment out of which many Nebraska settlers, both past and present, came as they made their way west.

All landscape plantings change and mature. As trees increase in size, so does the amount of shade in the landscape. If you are faced with this situation, take it as an opportunity to develop your own interpretation of Nebraska's eastern woodlands.

1. Notice the natural layering of vegetation in the forest, and then begin to think vertically about the cultivated landscape. Be concerned not only with big shade trees, but enhance the entire landscape by working in understory trees, shrubs and ground layer plantings.

2. The eastern woodlands are not a place of riotous colors, even in the full glory of autumn. Learn to be content with greens. The dominant trees such as oaks, ash and linden have more muted, understated fall colors. Use scatterings of sumac, rough-leaf dogwood or wahoo to bring accents of red and orange into the fall landscape.

3. Bring spring and summer color into the landscape through the use of smaller, ornamental trees such as redbuds, serviceberry, crabapples and hawthorns. These usually occur in masses in the wild, so use them in groupings in the landscape. These trees are especially attractive when viewed from a distance against a backdrop of vegetation.

4. There is little turf on the forest floor. Mulching under trees with woodchips is not only good for tree growth, it is more reflective of a natural woodland. Group together smaller trees and shrubs in mulched beds.

5. Plant spring-blooming herbaceous plants or bulbs beneath trees to bring color to the ground layer. Remember that most of these will go dormant by summer. Avoid using brightly colored annuals under the trees. Woodland wildflowers have a delicate beauty that is best appreciated up close. They normally do not make a big splash of color.

THE PLANTS OF THE EASTERN WOODLANDS

Canopy Trees, Dominant Species

bur oak, *Quercus macrocarpa*
hackberry, *Celtis occidentalis*
green ash, *Fraxinus pennsylvanica*
red oak, *Quercus rubra*
linden, *Tilia americana*
American elm, *Ulmus americana*

Other Species

Ohio buckeye, *Aesculus glabra*
bitternut hickory, *Carya cordiformis*
shagbark hickory, *Carya ovata*
white ash, *Fraxinus americana*
honeylocust, *Gleditsia triacanthos*
Kentucky coffeetree, *Gymnocladus dioica*
black walnut, *Juglans nigra*
eastern redcedar, *Juniperus virginiana*
white oak, *Quercus alba*
chinkapin oak, *Quercus muehlenbergii*
black oak, *Quercus velutina*

Understory Trees

redbud, *Cercis canadensis*
downy hawthorn, *Crataegus mollis*
eastern wahoo, *Euonymus atropurpureus*
ironwood, *Ostrya virginiana*
wild crabapple, *Pyrus ioensis*
bladdernut, *Staphylea trifolia*
prickly ash, *Zanthoxylum americanum*

Shrubs

rough-leaf dogwood, *Cornus drummondii*
hazelnut, *Corylus americana*
wild plum, *Prunus americana*
chokecherry, *Prunus virginiana*
dwarf chinkapin oak, *Quercus prinoides*
winged sumac, *Rhus copallina*
smooth sumac, *Rhus glabra*
gooseberry, *Ribes missouriense*
elderberry, *Sambucus canadensis*
coralberry, *Symphoricarpos orbiculatus*

Woody Vines

raccoon grape, *Ampelopsis cordata*
bittersweet, *Celastrus scandens*
virgins bower, *Clematis virginiana*
Virginia creeper, *Parthenocissus quinquefolia*

Wildflowers, Spring Ephemerals

spring beauty, *Claytonia virginica*
Dutchman's breeches, *Dicentra cucullaria*
trout lily, *Erythronium albidum*
mayapple, *Podophyllum peltatum*

bloodroot, *Sanguinaria canadensis*

Other Wildflowers

columbine, *Aquilegia canadensis*
jack-in-the-pulpit, *Arisaema triphyllum*
New England aster, *Aster novae-angliae*
tall bellflower, *Campanula americana*
boneset, *Eupatorium perfoliatum*
blue lobelia, *Lobelia syphilitica*
woodland phlox, *Phlox divaricata*
Solomon's seal, *Polygonatum biflorum*
golden glow, *Rudbeckia laciniata*
false Solomon's seal, *Smilacina stellata*
purple meadowrue, *Thalictrum dasycarpum*
spiderwort, *Tradescantia ohiensis*

Panhandle Pinelands

Just as the eastern deciduous forest has a tenuous foothold along the uplands of the Missouri River, outliers of the evergreen forest of the Rocky Mountains have found a home in scattered locations in the Nebraska Panhandle. Here, on the bluffs and buttes of the Pine Ridge Wildcat Hills and other escarpments, the vegetation is comprised of plants characteristic of the foothills of Colorado and Wyoming.

The signature plant of this region is the ponderosa pine. In some situations this evergreen tree forms dense, dark stands of true forest, while in more open areas it provides the framework for beautiful park-like savannas. Another species, limber pine, occurs in a small area in Kimball County. These pines have more than just visual appeal; their fragrance and the sound of the wind through their needlelike leaves creates a sensory experience completely different from that of the eastern woodlands.

There is not a great diversity of trees in these pinelands. Rocky Mountain juniper is a distant second to ponderosa pine in abundance, and most of the deciduous trees occur in draws and canyons where the pine is not so dominant. Typical deciduous species include hackberry, boxelder, cottonwood and green ash, along with the less common aspen, mountain maple and water birch. Pines do not form an overarching canopy like oak or linden trees, so there is not an understory layer of smaller trees as in the eastern woodlands.

A variety of shrubs occur in this landscape, mostly in openings or at the edges of the forest. Mountain mahogany forms dense, twiggy stands on rough ground, as does current and aromatic sumac. Common juniper forms low, evergreen mats of foliage over rocks and in openings in the forest. Oregon grape, a short broadleaf evergreen groundcover with holly like leaves, adds interest and

beauty to the forest floor. Fringed sagewort is a silvery, semishrubby plant with spicy-scented foliage that compliments the fragrance of pine.

The herbaceous members of this plant community are essentially prairie plants. Away from the influence of the pines, the vegetation is mixed grass and shortgrass prairie, and is dominated by low-growing grasses like blue grama and buffalograss. Most of the wildflowers are short-statured perennials that are very drought-tolerant. Some of the best shows of wildflowers are in the rockier habitats where the grasses are not as competitive.

DESIGN IMPLICATIONS

The famous conservationist Aldo Leopold once wrote, "I love all trees, but I am in love with pines." Few people would want to be without pines or other evergreen trees in the landscape. Consider using them in a way that reflects the Panhandle pinelands.

1. A dense planting of evergreens provides shelter and enclosure, but a savanna-like mixing of trees with open space is visually more pleasing. Isolated trees make nice specimens, but in nature pines tend to occur in groupings that follow the contours of the land.

2. Young pines tend to have branches to the ground, while more mature trees usually lose some lower branches. Let this process happen at the tree's pace and avoid the tendency to "limb up" pines to make it easier to mow around them. Use groupings of pines as a backdrop against which to mass smaller trees and shrubs.

3. The landscape of the Pine Ridge and Wildcat Hills exhibits dramatic topographic relief. Cultivated landscapes can reflect this through raised beds, berming, etc. However, such contouring of the landscape should be subtle and in keeping with the overall context of the site. Don't get carried away!

4. Stone is a beautiful part of the Panhandle landscape. When incorporating it into cultivated landscapes, use only native stone and place it into the contours of the landscape in a manner similar to its occurrence in the natural setting. In other words, try to re-create rock outcroppings; do not make unnatural piles or walls of rock.

5. Most of the native wildflowers of the Panhandle are adapted to hot, dry growing conditions. These conditions must be met in a cultivated landscape by providing a well-drained soil. Raised beds and the incorporation of rock chips and organic matter can help improve soil damage. Since most of these wildflowers are low-growing, raised beds are an excellent way to elevate these plants for closer observation by garden visitors.

THE PLANTS OF THE PANHANDLE PINELANDS

Dominant Trees

ponderosa pine, *Pinus ponderosa*
limber pine, *Pinus flexilis*
Rocky Mountain juniper, *Juniperus scopulorum*

Other Trees

mountain maple, *Acer glabrum*
water birch, *Betula occidentalis*
hackberry, *Celtis occidentalis*
green ash, *Fraxinus pennsylvanica*
cottonwood, *Populus deltoides*
aspens, *Populus tremuloides*

Shrubs

juneberry, *Amelanchier alnifolia*
fringed sagewort, *Artemisia frigida*
mountain mahogany, *Cercocarpus montanus*
rabbitbrush, *Chrysothamnus nauseosus*
hawthorn, *Crataegus succulenta*
common juniper, *Juniperus communis*
creeping juniper, *Juniperus horizontalis*
creeping mahonia, *Mahonia repens*
sandcherry, *Prunus besseyi*
chokecherry, *Prunus virginiana*
aromatic sumac, *Rhus aromatica*
clove current, *Ribes odoratum*
western wild rose, *Rosa woodsii*
buffaloberry, *Shepherdia argentea*
western snowberry, *Symphoricarpos occidentalis*

Woody Vines

western clematis, *Clematis ligusticifolia*
woodbine, *Parthenocissus vitacea*

Western Prairie Plants, Grasses

western wheatgrass, *Agropyron smithii*
blue grama, *Bouteloua gracilis*
hairy grama, *Bouteloua hirsuta*
buffalograss, *Buchloe dactyloides*
needle-&-thread, *Stipa comata*
little bluestem, *Schizachyrium scoparium*

Wildflowers

pasque flower, *Anemone patens*
pussytoes, *Antennaria parvifolia*
evening primrose, *Calylophus serrulatus* & *C. lavandulifolia*
harebells, *Campanula rotundifolia*
golden aster, *Chrysopsis villosa*
black sampson, *Echinacea angustifolia*
western wallflower, *Erysimum asperum*
dotted gayfeather, *Liatris punctata*

gumbo lily, *Oenothera caespitosa*
prickly pear, *Opuntia polyacantha*
locoweed, *Oxytropis lambertii*
phlox, *Phlox andicola* & *P. hoodii*
prairie coneflower, *Ratibida columnifera*
blue-eyed grass, *Sisyrinchium montanum*
cowboy's delight, *Sphaeralcea coccinea*
western spiderwort, *Tradescantia occidentalis*
vervain, *Verbena bipinnatifida*

The Prairie

It would be an understatement to say that Nebraskans appreciate trees. This is the state that gave rise to Arbor Day and the first statewide arboretum in the country. Yet, prior to settlement, forests and woodlands accounted for less than three percent of the natural vegetation of Nebraska. The rest was a landscape without trees - the prairie.

There are several types of prairie in Nebraska, ranging from the tallgrass prairie in the eastern third of the state, through the mixed prairie and sandhills prairie in the center, to the shortgrass prairie of the west. Each type has its own characteristic assortment of plants, yet there are patterns and features common to all.

The prairie is a plant community dominated by grasses. It is the fine-textured foliage of grasses, rather than the trunks and branches of trees, that gives definition to the prairie landscape. Willa Cather expressed it beautifully in *My Antonia*, "As I looked about me, I felt that the grass was the country, as the water is the sea."

After the grasses, wildflowers are the most abundant plants of the prairie. These nonwoody plants are usually perennials, meaning they die back to the ground each year after a few frosts, and re-emerge in the spring. Two families of plants, the sunflower and bean family, are particularly prominent in the prairie and make up a large percentage of the wildflowers present. A few shrubs also make a home among the grasses.

Unlike annual garden plants that produce flowers all growing season, prairie wildflowers have specific seasons of bloom. Some bloom very early in the spring, before the grasses begin to stir, and go dormant by summertime. Others do not start to flower until late in the summer. This seasonality makes the prairie a very dynamic landscape.

DESIGN IMPLICATIONS

Capturing the essence of the prairie can be approached with different levels of intensity. At one level is the re-creation of a "mini-prairie" by seeding

an area with a mixture of prairie grasses and wildflowers. At the other end of the spectrum is the use of representative grasses and wildflowers in standard horticultural ways, like a flowerbed or border, to give a prairie feel to the landscape. However this desire is carried out, it should be shaped by the natural attributes of the prairie.

Even though Nebraska's nickname is the "Tree Planters State," not all "vacant" space needs to be filled up with trees. The prairie is a place of great vistas and maintaining open spaces, even if it is a bluegrass lawn, which conveys a sense of the natural landscape. Such spaces can have more dramatic impact when deliberately framed by trees and shrubs or when they lead visually to even more distant vistas.

Grasses define the prairie, so work them into the landscape as much as possible. Use them as you might use shrubs - as foundation plantings, accent points, screens, etc.

Capturing a sense of the prairie does not mean eliminating trees and shrubs from the landscape. A prairie feel can be accomplished by simply adding beds and borders of prairie plants or by enhancing existing landscape features with prairie grasses and wildflowers.

While many prairie wildflowers are beautiful when viewed close up, their greatest impact is en masse. Plant individual species in sweeps and drifts in the garden and landscape.

The prairie is a very dynamic landscape. Use a combination of spring-, summer-, and fall-blooming wildflowers and other perennials to recreate the seasonality of the prairie.

THE PLANTS OF THE PRAIRIE

Grasses

big bluestem, *Andropogon gerardii*
sideoats grama, *Bouteloua curtipendula*
sand lovegrass, *Eragrostis trichoides*
junegrass, *Koeleria cristata*
switchgrass, *Panicum virgatum*
little bluestem, *Schizachyrium scoparium*
Indian grass, *Sorghastrum nutans*
prairie cordgrass, *Spartina pectinata*
prairie dropseed, *Sporobolus heterolepis*

Shrubs

leadplant, *Amorpha canescens*
Jersey tea, *Ceanothus americana* & *C. herbaceus*
prairie wild rose, *Rosa arkansana*
prairie willow, *Salix humilis*

Wildflowers

swamp milkweed, *Asclepias incarnata*
butterfly milkweed, *Asclepias tuberosa*
aster, *Aster oblongifolius*, *A. ericoides*, *A. fendleri*,
A. sericeus
baptisia, *Baptisia australis*, *B. bracteata*, & *B.*
leucantha
purple poppymallow, *Callirhoe involucrata*
prairieclover, *Dalea candida* (white) & *D. purpurea*
(purple)
plains larkspur, *Delphinium virescens*
pale purple coneflower, *Echinacea pallida*
Joe Pye weed, *Eupatorium maculatum*
sneezeweed, *Helenium autumnale*
false sunflower, *Heliopsis helianthoides*
rough gayfeather, *Liatris aspera*
thickspike gayfeather, *Liatris pycnostachya*
Missouri primrose, *Oenothera macrocarpa*
cobaea penstemon, *Penstemon cobaea*
shell-leaf penstemon, *Penstemon grandiflorus*
prairie phlox, *Phlox pilosa*
wild alfalfa, *Psoralea tenuiflora*
prairie coneflower, *Ratibida pinnata*

black-eyed susan, *Rudbeckia hirta*
prairie petunia, *Ruellia humilis*
blue sage, *Salvia azurea*
compass plant, *Silphium laciniatum*
blue-eyed grass, *Sisyrinchium campestre*
stiff goldenrod, *Solidago rigida*
showy goldenrod, *Solidago speciosa*
ironweed, *Vernonia fasciculata*
prairie violet, *Viola pedatifida*

Dr. John Weaver, the University of Nebraska's great prairie ecologist, used to tell his students that to understand the prairie, they needed "to look carefully and look often." This is wise council, not only for ecologists, but for horticulturists as well.

There is great beauty in the natural landscape of Nebraska if we take the time and make the effort to look closely. Let's take our inspiration from the beauty that surrounds us and create landscapes that reflect a sense of place and that celebrate being in Nebraska. Then we will be landscaping "Nebraska Style."